

REMARKS

I. Status Summary

Claims 1-42 are pending in the present application. Claims 2-5, 9, 17-18, 27-28, and 30-31 have been indicated as allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 1, 6-8, 10-16, 19-26, 29 and 32-42 presently stand rejected. Claims 1 and 40 have been canceled and claims 2, 6, 9-12, 14, 16-22, 27, 30, 32-34, and 41 have been amended. No new matter is added by the amendments and support for the amendments can be found, for example, in Figure 2 and page 10 of the present specification. Therefore, upon entry of this amendment, claims 2-39 and 41-42 will be pending.

II. Summary of Telephone Examiner Interview

Applicants acknowledge with appreciation the telephone interview granted by the examiner to Applicants' representatives, Gregory A. Hunt and Wesley A. Sheffield, on August 16, 2007. In the Telephone Examiner Interview, the presently pending claims, Carew, and page 7 of Applicants' present application were discussed. Agreement was not reached regarding the claims.

Regarding the rejection of claims 34-42 under 35 U.S.C. §101 and 35 U.S.C. §112, Applicants submitted a proposed amendment to independent claim 34 clarifying that the claimed computer program product comprises instructions embodied in a tangible computer readable medium that when executed by a processor of a computer performs the steps recited. Additionally, Applicants submitted that the disclosure of claims 34-42 were self-enabling and did not require additional description in the

specification. However, it was also submitted that pages 7-8 of the application disclosed that the computer program product may be implemented in hardware, software, firmware or any combination thereof. The examiner indicated that these arguments and amendments were persuasive and that the claims would be allowable.

Regarding the rejection of claims 1, 6-8, 10-16, 19-26, 29 and 32-33 under 35 U.S.C. §103, the official action indicated that claim 2 would be allowable if rewritten into proper independent form. This indication of allowability was confirmed by the examiner during the telephone interview.

At the conclusion of the Telephone Interview, Applicants agreed to file an amendment canceling independent claim 1 and amending claim 2 in order to place it into proper independent form. Applicants further agreed to amend dependent claims 6-8 and 10-16 to depend from claim 2 and to amend independent claims 19 and 34 to incorporate the limitations of claim 2. The amendments proposed above are consistent with the discussion in the Telephone Interview.

The Examiner is invited to call Applicants' attorney, Gregory A. Hunt, at (919) 493-8000 to conduct a subsequent telephone interview to resolve any outstanding issues.

III. Allowed and Allowable Claims

Applicants acknowledge that claims 2-5, 9, 17-18, 27-28, and 30-31 are objected to as being dependent upon a rejected base claim, but that they would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims.

Claim 2 has been rewritten in independent form to include all of the elements of claim 1, from which claim 2 depended. Claims 3-5 each depend from rewritten independent claim 2. Claims 6-8 and 10-16 have been amended to depend from claim 2. Therefore, it is respectfully submitted that claims 2-8 and 10-16 should now be allowed.

Claim 9 has been rewritten in independent form to include all of the elements of claim 1, from which claim 9 depended. Therefore, it is respectfully submitted that claim 9 should now be allowed.

Claims 17 and 18 have been rewritten in independent form to include all of the elements of claims 1 and 16, from which claims 17-18 respectively depended. Therefore, it is respectfully submitted that claims 17-18 should be allowed.

Claim 27 has been rewritten in independent form to include all of the elements of claims 1 and 26, from which claim 27 depended. Claim 28 depends from rewritten independent claim 27. Therefore, it is respectfully submitted that claims 27-28 should now be allowed.

Claim 30 has been rewritten in independent form to include all of the elements of claims 19 and 29, from which claim 30 depended. Claim 31 depends from rewritten independent claim 30. Therefore, it is respectfully submitted that claims 30-31 should now be allowed.

IV. Claim Rejections - 35 U.S.C. § 101

Claims 34-42 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Specifically, the Official Action asserts that the claims recite a

computer program *per se*, which does not fall into one of the four statutory classes of invention. This rejection is respectfully traversed.

Independent claim 34, from which claims 35-42 depend, has been amended herein to recite a computer program product comprising computer executable instructions embodied in a tangible computer readable medium and which when executed by a processor of a computer perform steps comprising the method of claim 1. As amended herein, the steps recited in claim 34 are performed by a processor of a computer and therefore fall into one of the four statutory classes of invention. Accordingly, it is respectfully submitted that the rejection of claims 34-42 should be withdrawn.

V. Claim Rejections - 35 U.S.C. § 112

Claims 34-42 are rejected under 35 U.S.C. § 112, first paragraph, as being based on a disclosure which is not enabling. Specifically, the Official Action asserts that the computer programs recited in the claims are critical or essential to the practice of the invention, but are not enabled by the disclosure. These rejections are respectfully traversed.

Applicant respectfully submits that claims 34-42, by themselves, constitute an enabling disclosure. According to the MPEP, "when the subject matter is not in the specification portion of the application as filed but is in the claims, the limitation in and of itself may enable one skilled in the art to make and use the claim containing the limitation." (see MPEP § 2164). In the present application, applicant respectfully submits that one of ordinary skill in the art would understand that the computer program

products recited in claims 34-42 are to be executed by a processor of a computer and therefore would enable one skilled in the art to perform the steps recited in claims 34-42.

Additionally, support in the specification can be found on pages 7-8 of the present application where it states that, "dynamic resource manager **204** may be implemented in hardware, software, firmware, or any combination thereof as part of a control module **202** within media gateway **200**." (See page 7 line 21 – page 8 line 2 of the present application).

Accordingly, it is respectfully submitted that the rejections of claims 34-42 should be withdrawn.

VI. Rejections under 35 U.S.C. § 103

A. § 103 - Claims 1, 6-8, 11, 14-16, 19-20, 22-26, 29, and 32-36

Claims 1, 6-8, 11, 14-16, 19-20, 22-26, 29, and 32-36 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,879,667 to Carew et al. (hereinafter, "Carew") in view of U.S. Patent Publication No. 2007/0083528 to Matthews et al. (hereinafter, "Matthews"). This rejection is respectfully traversed.

Claims 1, 6-8, 11, and 14-16 have been either canceled or amended to be allowable or depend from an allowable claim as indicated above. Accordingly, the rejection of these claims should now be withdrawn.

Independent claim 19 has been amended to include the limitations of claim 2. Thus, claim 19 recites a system for dynamic media gateway resource allocation on a per session basis. The system includes a plurality of voice chips pooled in a common

resource pool for performing voice processing operations on media packets associated with a session. Pooling voice server resources includes combining M voice server cards into the shared pool of voice server resources, M being an integer, wherein each voice server card includes N_m voice chips, N_m being an integer representing the number of voice chips on the m^{th} voice server card, and each voice chip supports K_{mn} voice channels, K_{mn} being an integer representing the number of channels of the n^{th} voice chip on the m^{th} voice server card where N_m and K_{mn} are different for at least some of the voice chips. The system further includes a plurality of network interfaces coupled to the voice chips for forwarding incoming media packets to the voice chips and forwarding outbound media packets from the voice chips to external networks. A dynamic resource manager operatively associated with the packet interfaces and the voice chips dynamically allocates voice chips from the common resource pool to process new sessions on a per session basis and dynamically assigns a logical resource identifier to each session. Thus, claim 19 includes all of the limitations of claim 2, which was indicated as allowable.

Moreover, there is absolutely no disclosure, teaching, or suggestion in Carew or Matthews of combining M voice server cards each including N_m voice chips that each support K_{mn} voice channels, where N_m and K_{mn} are different for at least some of the voice chips. Rather, Carew teaches a "telephony port module **102** and voice processing module **108** include digital signal processor resources, such as decompression, echo cancellation, and other voice processing functions." (See column 5, lines 37-41 of Carew). Nowhere does Carew mention the pooling of M voice server cards with N_m voice chips as claimed in independent claim 19. Carew mentions only the sharing of

DSP resources among telephony connections without mentioning the number of cards and voice chips per card as claimed in claim 19. Thus, Carew fails to teach or even remotely suggest pooling voice server resources by combining M voice server cards into a shared pool of voice server resources where each voice server card includes N_m voice chips as claimed.

Matthews likewise lacks such teaching or suggestion. Matthews is directed to a switch management system. Nowhere does Matthews mention a pooling of voice server cards having voice processing resources as claimed. Accordingly, it is respectfully submitted that the rejection of claim 19 and dependent claims 20, 22-26, 29, and 32-33, which depend from claim 19, as unpatentable over Carew in view of Matthews should be withdrawn.

Claim 34 recites a computer program product comprising computer executable instructions embodied in a tangible computer readable medium that when executed by a processor of a computer performs steps including dynamically allocating a voice chip from a pool of voice chips for each new call/session to process media packets associated with the session. Claim 34 has been amended to recite dynamically assigning a logical resource identifier to each session that includes dynamically allocating a local IP address and local UDP port for each session. A plurality of media packets is received relating to a session from a plurality of different external networks and a plurality of media packets relating to the session are sent to the external networks. The voice packets associated with each session are processed using the voice chip dynamically assigned to the session. Thus, claim 34, like claim 27 which the

Examiner indicated as allowable now recites that a local IP address and a local UDP port are dynamically assigned to each session.

There is absolutely no disclosure, teaching, or suggestion in Carew of dynamically allocating a logical resource identifier including a local IP address and a local UDP port for each session.. Instead, Carew is directed to dynamically allocating DSP resources to PSTN connections. For example, Carew states:

By sharing digital signal processing resources behind PSTN 11 interfaces, specific resources may be assigned on a dynamic basis. (See column 5, lines 47-50 of Carew.)

In the above-quoted passage, Carew indicates that DSP resources are shared between PSTN interfaces. PSTN interfaces are circuit switched interfaces and do not involve IP addresses or UDP ports. Therefore, Carew cannot possibly teach or suggest dynamically allocating a local IP address and UDP port for a connection as claimed.

Matthews likewise fails to teach or suggest dynamically allocating a local IP address and UDP port to a connection as claimed in claim 34. Matthews is directed to a system for managing a switch. Paragraph [0061] in Matthews referred to in the Official Action indicates that each processing element within a switch includes a unique ID. There is no mention however in Matthews that the processing element or unique ID is dynamically assigned. Rather, in order to ensure global uniqueness of the PE ID as disclosed in Matthews such an ID would have to be assigned at programming or provisioning time, rather than being dynamically allocated when a new connection arrives. Accordingly, Matthews fails to teach or suggest dynamically assigning a local IP address and UDP port number to a connection as claimed. Thus, it is respectfully

submitted that the rejection of claims 34-36 as unpatentable over Carew in view of Matthews should be withdrawn.

B. § 103 - Claims 10 and 21

Claims and 10 and 21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Carew in view of Matthews, and further in view of U.S. Patent No. 6,061,348 to Castrigno et al. (hereinafter, "Castrigno"). This rejection is respectfully traversed.

Claim 2 was indicated in the Official Action as allowable. Claim 10 has been amended to depend from claim 2. Accordingly, it is respectfully submitted that the claim 10 should now be allowed.

Claim 21 depends from claim 19. As stated above with regard to the rejection of claim 19 as unpatentable over Carew in view of Matthews, Carew and Matthews fail to teach or suggest pooling voice server resources where the resources include N voice server cards where each card includes N_m voice chips. Castrigno likewise lacks such teaching or suggestion. The portion of Castrigno cited in the Official Action discusses the ATM cell reassembly process. There is no mention of pooling or dynamically allocating voice processing resources as claimed. Accordingly, it is respectfully submitted that the rejection of claim 21 as unpatentable over Carew in view of Matthews and further in view of Castrigno should be withdrawn.

C. § 103 - Claims 12 and 13

Claims 12 and 13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Carew in view of Matthews as applied to claim 1, and further in view of U.S. Patent Publication No. 2004/0066782 to Nassar et al. (hereinafter, "Nassar"). This rejection is respectfully traversed.

Claims 12 and 13 have been amended to depend from claim 2, which was indicated as allowable. Accordingly, it is respectfully submitted that the rejection of claims 12 and 13 as unpatentable over Carew in view of Matthews and further in view of Nassar should be withdrawn.

CONCLUSION

In light of the above remarks, it is respectfully submitted that the present application is now in proper condition for allowance, and an early notice to such effect is earnestly solicited.

If any small matter should remain outstanding after the Patent Examiner has had an opportunity to review the above Remarks and Amendments, the Patent Examiner is respectfully requested to telephone the undersigned patent attorney in order to resolve these matters and avoid the issuance of another Official Action.

DEPOSIT ACCOUNT

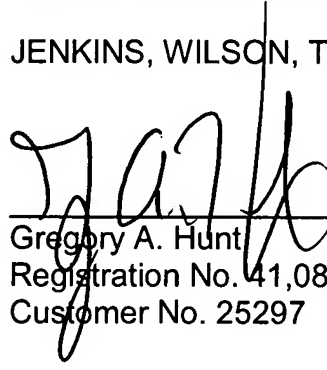
Although no fee is believed to be due, the Commissioner is hereby authorized to charge any fees associated with the filing of this correspondence to Deposit Account No. 50-0426.

Respectfully submitted,

JENKINS, WILSON, TAYLOR & HUNT, P.A.

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